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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,272	01/20/2004	Chuan-Kung Hou	MR2847-10	6843
4586 7590 03/19/2008 ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043				
EXAMINER				
WANG, KIENT F				
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2622				
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03/19/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/759,272

Applicant(s)

HOU, CHUAN-KUNG

Examiner

KENT WANG

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/28/2008 has been entered.

Response to Amendment

2. The amendments, filed on 01/28/2008, have been entered and made of record. Claims 20-37 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 20-37 have been considered but are moot in view of the new ground(s) or rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20-37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US 7,269,442) in view of Lee (US 2004/0097258).

Regarding claim 20, Sato discloses a combination picture-taking and sound-generating apparatus for use with a portable electronic device (a portable telephone with a camera, Fig 1), the apparatus comprising:

- a housing (a hinge portion 3, Fig 1) having a generally circular cross-section, an open end (first rotating portion 51, Fig 1), a closed end (second rotating portion 52, Fig 1), exterior walls defining an exterior surface, a viewfinder window in the exterior surface (an aperture window 63A, Fig 1), and interior walls defining a generally hollow interior portion (col. 3, line 3 to col. 4, line 50 and col. 5, lines 45-51);
- a picture-taking element (an imaging unit 6, Fig 3) within the generally hollow interior portion (first rotating portion 51, Fig 1) and proximate to the viewfinder window (63A), wherein the picture-taking element (6) is configured to capture images and generate image signals corresponding to the captured images for transmission to the portable electronic device (col. 5, lines 20-29); and
- a cap (a cap 63, Fig 3) covering the open end of the housing (first rotating portion 51, Fig 1), wherein the cap and the housing enclose the picture-taking element (6) (col. 5, lines 20-29).

Sato does not teach the video/audio combo device adopted to comprise a sound-generating element within the generally hollow interior portion and proximate to the

at least one audio port and a resonant space for sounds generated by the sound-generating element. However, Lee teaches a video/audio combo device a sound-generating element (a pair of side speakers S1 and S2, Fig 8) within the generally hollow interior portion (a center hinge arm 26, Fig 2) and proximate to the at least one audio port (side hinge arms 15a and 15b, Fig 2), wherein the sound-generating element (S1, S2) is configured to receive audio signals from the portable electronic device (a portable terminal) and generate sounds corresponding to the audio signals ([0034]-[0035]); Lee further teaches a generally hollow interior portion (26) is positioned as a resonant space for sounds generated by the sound-generating element (S1, S2) (resonance block 115 partitions the empty space 113 between the speakers S1 and S2 to provide two separate isolated resonant space from interfering each other ([0047]-[0049])).

Here, although Sato does not teach the video/audio combo device adopted to comprise a sound-generating element within the generally hollow interior portion, it is noted that when modify the camera to incorporate a portable terminal capable of providing stereo sound as suggested by Lee, one skilled in the art would recognize the need of mounting these speakers in the first rotating member in order to receive audio signals from the portable electronic device and generate sounds corresponding to the audio signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to have using a pair of speakers as taught by Lee as modified by Sato so that it makes possible to have a sound-generating element in the generally hollow interior portion as claimed, so that a barrier disposed behind the

side speakers to prevent sound emitted from the side speakers from interfering with each other and a user can enjoy stereo sound while shooting a picture ([0015], Lee).

Regarding claim 21, Sato discloses a closed end (second rotating portion 52) has a first axle (first rotating portion 41, Fig 3) formed thereon and the cap (a cap 63, Fig 3) has a second axle (a tubular portion 62C, Figs 3-4) formed thereon, the first and second axles (41, 62C) configured to be operably coupled to the portable electronic device, and wherein the apparatus is rotatably movable about the first and second axles relative to the portable electronic device (rotating function and imparting a direction-of-axis force) (col. 4, lines 4-22 and col. 5, lines 60-64 and Fig 3).

Regarding claim 22, Sato discloses a housing (a hinge portion 3, Fig 1) having a generally circular cross-section has a closed end (second rotating portion 52, Fig 1) and Lee discloses at least one audio port (side hinge arms 15a and 15b, Fig 2) is at a portion of the exterior surface (a center hinge arm 26) ([0033], Lee).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to have used an audio port as taught by Lee as modified by Sato so that it makes possible to have one audio port is at a portion of the exterior surface corresponding to the closed end as achieve the claimed invention.

Regarding claim 23, Sato discloses the picture-taking element includes a Charge Coupled Device (col. 5, lines 30-44).

Regarding claim 24, the limitations of claim 20 are taught above, Lee does teach that the camera has a pair of speakers that providing stereo sound. While Lee does not teach the use of Mylar speakers, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art to have included any speakers with a

thin diaphragm and suspended between two screens or perforated metal sheets, and thus producing high frequencies from the high pitched sounds.

Regarding claims 25 and 26, these claims recite same limitations as claims 20 and 21, respectively. Thus they are analyzed and rejected as previously discussed with respect to claims 20 and 21 above.

Regarding claim 27, Sato does teach the apparatus (the hinge portion 3, Fig 1) is configured to be fixedly positioned in the portable electronic device (lower housing 1 and upper housing 2, Fig 1) (col. 3, line 65 to col. 4, line 3).

Regarding claim 28, Sato does teach the body (the hinge portion 3, Fig 1) includes a first portion having an interior region (first rotating portion 51, Fig 1) and a second portion (second rotating portion 52, Fig 1) configured to be attached to the first portion, the first and second portions (51, 52) forming the interior region of the body (3) (col. 3, line 65 to col. 4, line 50). Sato does not teach the interior region of the body that provides the resonant space.

Lee teaches a generally hollow interior portion (26) is positioned as a resonant space for sounds generated by the sound-generating element (S1, S2) (resonance block 115 partitions the empty space 113 between the speakers S1 and S2 to provide two separate isolated resonant space from interfering each other ([0047]-[0049]).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to have using a pair of speakers as taught by Lee as modified by Sato so that it makes possible to have a sound-generating element in the generally hollow interior portion as claimed, so that a barrier disposed behind the side speakers

to prevent sound emitted from the side speakers from interfering with each other and a user can enjoy stereo sound while shooting a picture ([0015], Lee).

Regarding claim 29, this claim differs from claim 20 only in that the claim 20 is a "single speaker" claim whereas claim 29 is a "two speakers" claim. Lee discloses the video/audio combo device comprising a pair of side speakers (S1 and S2, Fig 8), wherein the sound-generating element (S1, S2) is configured to receive audio signals from the portable electronic device (a portable terminal) and generate sounds corresponding to the audio signals ([0047]-[0049]). Thus the method claim 29 is analyzed and rejected as previously discussed with respect to claim 20 above.

Regarding claims 30 and 31, these claims recite same limitations as claims 27 and 21, respectively. Thus they are analyzed and rejected as previously discussed with respect to claims 27 and 21 above.

Regarding claim 32, Lee does teach the opening is a first opening (side hinge arms 15a, Fig 2), the housing further has a second opening in the exterior surface (side hinge arms 15b, Fig 2). Lee references does not specifically teach an electrical connector attached to the image-capturing element, however Lee does teach that the "portable terminals" are electronic devices which gave implicit that the device comprising an electrical connector attached to the image-capturing element ([0005]).

Regarding claim 33, this claim recites same limitations as claim 32. Thus it is analyzed and rejected as previously discussed with respect to claim 32 above.

Regarding claims 34 and 35, these claims recite same limitations as claims 28 and 22, respectively. Thus they are analyzed and rejected as previously discussed with respect to claims 28 and 22 above.

Regarding claim 36, this claim recites same limitations as claim 20. Thus it is analyzed and rejected as previously discussed with respect to claim 20 above.

Regarding claim 37, Sato does teach the means for enabling the apparatus (center hinge arm 3, Fig 1) to be rotatably positioned in the portable electronic device (lower housing 1 and upper housing 2, Fig 1) (col. 3, line 65 to col. 4, line 3).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Haberkern et al. (US 4,633,323), Nakamura (US 7,190,968), and Manico et al. (US 7,259,793).

Inquiries

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

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<http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW

4 March 2008

/Timothy J Henn/

Examiner, Art Unit 2622